

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method for the production of a MUC1 molecule which is able to generate an immune response in humans, comprising:

(a) contacting a mixture of MUC1 molecules with an antibody having the following properties:

(i) binding to the immunodominant region of the MUC1 tandem repeat; and

(ii) the binding to a MUC1 fragment which has a length of between 9 and 40 amino acids and which contains sequences of the MUC1 tandem repeat and the immunodominant region is made possible or increased by glycosylation of the threonine of a PDTR sequence; and

(iii) the binding of an unglycosylated MUC1 tandem repeat is increased if the unglycosylated MUC1 tandem repeats are present in series; and

(iv) the binding to multiple glycosylated MUC1 tandem repeats which carry glycosylations at the threonines of several PDTR sequences of the immunodominant region is increased according to an additive effect from the length and the PDTR glycosylation vis-à-vis the short MUC1 fragments from ii);

for a period of time which is sufficient and under conditions which are suitable so that an immune complex is formed;

(b) isolation of the immune complex; and

(c) providing the MUC1 molecule from the immune complex ,

wherein the mixture of MUC1 molecules is expressed and/or secreted by a cell line that expresses and/or secretes tumor associated MUC1 molecules, or a cell lysate thereof of the cell line.

2. (Currently amended) A method for the identification of a MUC1 molecule which is able to generate an immune response in humans, comprising:

(a) contacting a mixture of MUC1 molecules with an antibody having the following properties:

(i) binding to the immunodominant region of the MUC1 tandem repeat;
and

(ii) the binding to a MUC1 fragment which has a length of between 9 and 40 amino acids and which contains sequences of the MUC1 tandem repeat and the immunodominant region is made possible or increased by glycosylation of the threonine of a PDTR sequence; and

(iii) the binding of an unglycosylated MUC1 tandem repeat is increased if the unglycosylated MUC1 tandem repeats are present in series; and

(iv) the binding to multiple glycosylated MUC1 tandem repeats which carry glycosylations at the threonines of several PDTR sequences of the immunodominant region is increased according to an additive effect from the length and the PDTR glycosylation vis-à-vis the short MUC1 fragments from ii);

for a period of time which is sufficient and under conditions which are suitable so that an immune complex is formed;

(b) isolation of the immune complex,

wherein the mixture of MUC1 molecules is expressed and/or secreted by a cell line that expresses and/or secretes tumor associated MUC1 molecules, or a cell lysate thereof of the cell line.

3-8. (Cancelled)

9. (Currently amended) A method for producing a pharmaceutical composition comprising the steps of the method of any one of claims 1 or 2 further comprising the step of formulating the MUC1 molecule, ~~the cell, the cell lysates or the antibody~~ in a pharmaceutically acceptable form.

10. (Previously presented) A method for producing a pharmaceutical composition comprising the steps of the method according to claims 1 or 2 further comprising the step of formulating the MUC1 molecule in a diagnostically applicable form.

11. (Previously presented) A method of treating tumors comprising administering a composition comprising a MUC1 molecule obtainable by a method according to any one of claims 1 or 2.

12-13. (Cancelled)